Fujitsu recommends Windows.

Data Sheet
FUJITSU CELSIUS R940 Workstation

Breaking all Barriers

Fujitsu's CELSIUS R940 is designed to surpass all your expectations. Achieving first-class benchmark results, this reliable, high-end dual processor workstation is individually configurable and optimized for extremely demanding and memory intensive multi-threaded applications in a 24/7 operating environment. Offering the latest NVIDIA GRID™ graphics virtualization cards, the CELSIUS R940 is your reliable partner for graphics virtualization and High Performance Computing. CELSIUS workstations offer you an "IT made in Germany" quality – from design to production – in which you can trust.

Designed to perform around the clock
Maximum reliability in a dual-socket workstation
- Selection of top-quality components and thorough testing ensure a high product standard allowing you to operate 24/7

Workstations to join virtualization
Enterprise virtualization, now being made available to desktop workstations, allows to share the GPU across multiple user sessions while ensuring at the same time central data security and protection against theft or damage
- Incorporating latest NVIDIA GRID™, Intel® Xeon Phi™ graphics or compute cards

German engineering and production
Long-lasting expertise in designing and manufacturing workstations as well as comprehensive testing in certified in-house laboratories
- Selection of top-quality components ensure a high product standard

Unleash the power
Up to 1024GB of DDR4 memory, three ultra-high-end or four mid-range graphic cards and eight hard disk drives
- New Fujitsu PCIe SSD card and SAS RAID Controller (with 12Gbit/s & 1GB cache)

Built to order
Free configurability for all product lines
- Customer is given a system optimized for his requirements

Components

Processor	Intel® Xeon® processor E5-2699v3 (18 cores, 2.30 GHz, 45 MB)
	Intel® Xeon® processor E5-2697v3 (14 cores, 2.60 GHz, 35 MB)
	Intel® Xeon® processor E5-2690v3 (12 cores, 2.60 GHz, 30 MB)
	Intel® Xeon® processor E5-2687Wv3 (10 Cores, 3.10 GHz, 25 MB)
	Intel® Xeon® processor E5-2680v3 (12 cores, 2.50 GHz, 30 MB)
	Intel® Xeon® processor E5-2670v3 (12 cores, 2.30 GHz, 30 MB)
	Intel® Xeon® processor E5-2667v3 (8 Cores, 3.20 GHz, 20 MB)
	Intel® Xeon® processor E5-2650v3 (10 Cores, 2.30 GHz, 25 MB)
	Intel® Xeon® processor E5-2643v3 (6 Cores, 3.40 GHz, 20 MB)
	Intel® Xeon® processor E5-2640v3 (8 Cores, 2.60 GHz, 20 MB)
	Intel® Xeon® processor E5-2637v3 (4 Cores, 3.50 GHz, 15 MB)
	Intel® Xeon® processor E5-2630v3 (8 Cores, 2.40 GHz, 20 MB)
	Intel® Xeon® processor E5-2623v3 (4 Cores, 3.00 GHz, 10 MB)
	Intel® Xeon® processor E5-2620v3 (6 Cores, 2.40 GHz, 15 MB)
	Intel® Xeon® processor E5-2609v3 (6 Cores, 1.90 GHz, 15 MB)
	Intel® Xeon® processor E5-2603v3 (6 Cores, 1.60 GHz, 15 MB)
Operating systems	
Operating system	Windows 8.1 Pro 64-bit Windows 8 Pro 64-bit Windows 7 Professional 64-bit
Operating system compatible	Windows® Server 2012 Linux
Operating system notes	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server
Memory modules	4 GB (1 module(s) 4 GB) DDR4, registered, ECC, 2,133 MHz, PC4-2133
	8 GB (1 module(s) 8 GB) DDR4, registered, ECC, 2,133 MHz, PC4-2133
	16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,133 MHz, PC4-2133
	32 GB (1 module(s) 32 GB) DDR4, registered, ECC, 2,133 MHz, PC4-2133
Graphics	Midrange 3D: AMD FirePro™ W5100 , 4 GB, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	High-end 3D: AMD FirePro™ W7100, 8 GB, PCIe x16, 4 x DisplayPort
	Ultra-high-end 3D: AMD FirePro™ W9100, 16 GB, 2816 stream processors, PCIe x16, 6x miniDP, 6x miniDP/DP Adapter
	Ultra-high-end 3D: NVIDIA® Quadro® K6000, 12 GB, 2,880 cores, PCIe x16, 1x Dual Link DVI-I, 1x Dual Link DVI-D, 2x DisplayPort
	Ultra-high-end 3D: NVIDIA® Quadro® K5200, 8 GB, 2304 cores, PCIe x16, 1x Dual Link DVI-I, DVI-D, 2x DisplayPort
	High-end 3D: NVIDIA® Quadro® K4200, 4 GB, 1344 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: NVIDIA® Quadro® K2200, 4 GB, 640 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: AMD FirePro™ W4100, 2 GB, 512 stream processors, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: NVIDIA® Quadro® K620, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: AMD FirePro™ W2100, 2 GB, 320 stream processors, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: NVIDIA® Quadro® K420, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Professional 2D: NVIDIA® NVS 510, 2 GB, 16 cores, PCIe 2.0 x16, 4x miniDP, 4x miniDP/DP Adapter
	Professional 2D: NVIDIA® NVS 315, 1 GB, 48 cores, PCIe 2.0 x16, 2x LFH59 (DP/DVI-I)
	GPU computing card: NVIDIA® Tesla™ K20, 5 GB, 2,496 cores, PCIe x16
	GPU computing card: NVIDIA® GRID K1 16GB A, 16 GB, 768 cores, PCIe x16
	GPU computing card: NVIDIA® GRID K2 8GB A, 8 GB, 3,072 cores, PCIe x16
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP
Personal Supercomputing	Coprocessor: Intel® Xeon Phi™ Coprocessor 3120A, PCIe x16
	Coprocessor: Intel® Xeon Phi™ Coprocessor 5110P, PCIe x16

Hard disk drives (internal)	SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	SSD SATA III Premium, 512 GB, 2.5-inch
	SSD SATA III Premium, 256 GB, 2.5-inch
	SSD SATA III Premium, 128 GB, 2.5-inch
	SSD SATA III, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch, SED bay
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED bay
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 10,000 rpm, 1,000 GB, 2.5-inch, business critical
	HDD SATA III, 10,000 rpm, 500 GB, 2.5-inch, business critical
	HDD SATA III, 7,200 rpm, 4,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 3,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	HDD SAS, 15,000 rpm, 600 GB, 2.5-inch
	HDD SAS, 15,000 rpm, 300 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 900 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 600 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 300 GB, 2.5-inch
Hard disk notes	*Disk imaging software of the customer must be 4k sector size / advanced format ready One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (business critical HDDs required)
Drives (optional)	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	DVD Super Multi ultra slim
	MultiCard Reader 24in1 USB 2.0 3.5"
SCSI / SAS Controller	RAID 5/6 Ctrl. 12 Gbit/s 8 ports int.
	RAID 0/1 Ctrl. 6 Gbit/s 8 ports int.
Interface add on cards/components (optional)	
	WLAN 802.11 a/g/n (2x2), (dedicated regions only, not for Indonesia)
	eSATA Interface
	Dual serial card PCIe x1
	Dual 10 Gigabit Ethernet PCIe x8
Interface add on/component note	
Base unit	CELSIUS R940
Mainboard	
Mainboard type	D3358
Formfactor	proprietary
Processor	Intel® Xeon® processor E5-2600 v3 family ()
Chipset	Intel® C612
Processor socket	Socket R3
Processor quantity maximum	2
Memory slots	16 (8 per processor) DIMM (DDR4) ECC

Mainboard	
Supported capacity RAM (max.)	512 GB
LAN	Built-in 10/100/1,000 MBit/s Intel® I217LM and Intel® I210
BIOS version	AMI Aptio V
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
Audio type	On board
Audio codec	Realtek ALC671
Audio features	High Definition Audio
I/O controller on board	
Serial ATA total	10
thereof SATA III	10
thereof eSATA	
Controller functions	Serial ATA III (6 Gbit) AHCI RAID 0/1/5/10
Interfaces	
Audio: in (rear)	1
Audio: out (rear)	1
Audio: in	1
Audio: out	1
Internal speakers	1
USB 2.0 total	9
USB 3.0 total	4
USB front	4 (2x USB 3.0)
USB rear	6
USB internal	3, thereof 1 type A
Ethernet (RJ-45)	2
Interface Module notes	Anytime USB charge functionality
Input device / components	
	Optical USB wheel mouse
Input devices (optional)	Keyboard Optical USB tilt wheel mouse Optical USB wheel mouse
Drive bays	
Drive bays total	12
2.5-inch internal bays	8
3.5-inch internal bays	4
3.5-inch external bays	2
5.25-inch external bays	2
Drive bay notes	Up to 8x 2.5-inch HDDs (cold plug) and 1x 2.5-inch SSD or Up to 4x 3.5-inch HDDs (cold plug) and 1x 2.5-inch SSD or Up to 2x 2.5-inch and 2x 3.5-inch HDDs (cold plug) and 1x 2.5-inch SSD
Slots	
PCI-Express 3.0 x8	1 x (200 mm) Full height
PCI-Express 3.0 x16	4 x (340 mm / 13.39 inch) Full height (2x PCIe 3.0x16 per processor)
PCI-Express 2.0 x4 (mech. x16)	1 x (340 mm / 13.39 inch) Full height
PCI-Express 2.0 x1 (mech. x8)	1 x (340 mm / 13.39 inch) Full height
PCI-Express 3.0 x8 (internal)	1 x (170 mm / 6.69 inch) Full height (available with 2nd CPU)
Electrical values	
Power consumption note	500 W depending on configuration
Rated voltage range	100 V - 240 V

Electrical values	
Rated frequency range	50 Hz - 60 Hz
Operating voltage range	100 V - 240 V
Operating line frequency range	50 Hz - 60 Hz
Max. output of single power supply	1000 W up to 90% efficiency
Power factor correction/active power	active
Power supply output	2 graphics power rails (8pin connector / 18.5A@12V)

Noise for standard configuration (HDD, ODD, FDD)	
Related Processors for noise	Intel® Xeon® E5-2643v3 w/ NVIDIA® Quadro® K2200
Standard noise emission	8x4 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
Standard noise notes / description	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))
Standard noise operation mode: CPU 50% load	4.0 B / 23 dB(A) Bystander position
Standard noise operation mode: CPU 90% load	4.4 B / 26 dB(A) Bystander position
Standard noise operation mode: HDD load	3.9 B / 23 dB(A) Bystander position
Standard noise operation mode: Idle mode	3.8 B / 22 dB(A) Bystander position
Standard noise operation mode: ODD load	4.6 B / 29 dB(A) Bystander position
Standard noise operation mode: Office applications 2.0	3.8 B / 22 dB(A) Bystander position

Dimensions / Weight / Environmental	
Dimensions (W x D x H)	186 x 618 x 430 mm
Operating position	Vertical / horizontal
Weight	20 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C (50 - 95 °F)
Operating relative humidity	5 - 85 % (relative humidity)

Compliance	
Product	CELSIUS R940
Model	ETNA_L-D3358
Germany	GS depending on configuration
Europe	CE
USA/Canada	FCC Class B cCSAus
Global	RoHS (EU & China) Microsoft Operating Systems (HCT / HCL entry / WHQL) WEEE (Waste electrical and electronic equipment) ENERGY STAR® 5.0 (depending on configuration) EPEAT® Gold (dedicated regions)
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

Additional Software	
Additional software (preinstalled)	Workplace Protect (secure authentication solution) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Microsoft Office (buy license to activate the pre-installed Microsoft Office)
Additional software (optional)	Drivers & Utilities DVD (DUDVD) Windows® 8 and Windows® 7

Security	
Physical Security	Kensington Lock support Eye for padlock Intrusion switch Integrated cabinet lock (optional)
System and BIOS Security	Write protect option for the Flash EPROM Boot protection for floppy disk / CD drive and write protection for floppy disk drive Control of all USB interfaces Trusted platform module (TPM 1.2) EraseDisk
User Security	User and supervisor BIOS password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional)
Manageability	
Manageability technology	DeskUpdate Driver management iAMT 9.0 (depending on CPU)
Manageability software	DeskView Client DeskView Instant BIOS Management DeskView Integration for Symantec Management Platform
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management
Supported standards	WMI BootP (made4you) PXE WoL (Wake on LAN)
Manageability link	http://www.fujitsu.com/fts/manageability
Miscellaneous	
	Rack mountable (5U)
Spare part availability	5 years
Packaging information	
Packaging dimension (mm)	394 x 730 x 578 mm
Packaging dimension (inch)	15.51 x 28.74 x 22.76 inch
Max. quantity / pallet	11
Packaging notes	printed user documentation is bleached in chlorine free process
Warranty	
Standard Warranty	3 years (depending on country)
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 3 years material warranty)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Product Support Services - the perfect extension	
Recommended Service	9x5, Response Time: Next Business Day
Spare Parts availability	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

Recommended Accessories

Display P27T-7 LED

Enjoy perfect picture quality with 3.7 Mio pixels, outstanding ergonomics and usability as well as comfortable energy saving solutions of this 68.5 cm (27-inch) widescreen FUJITSU P Line Display. Energy Efficiency Class: A

Order Code: S26361-K1442-V140

Blue LED Mouse GL9000		Blue LED Mouse GL9000 comes in a slim design with proven Fujitsu engineering quality. The state-of-the-art blue LED sensor enables ultra precise switchable resolution at 1,000, 1,500 and 2,000 dpi. Blue LED Mouse GL9000 makes your life easier because it's tailor-made for right handed users. It just feels great in your hand.	Order Code: S26381-K438-L100
SpaceMouse™ Pro		Using the SpaceMouse™ Pro 3D mouse to navigate 3D models or environments is as simple as holding them in your hand. A slight movement of the controller cap delivers easy and precise control. SpaceMouse™ Pro is a companion to the traditional mouse and is operated with the free hand. Your traditional mouse hand is free to select, create and edit.	Order Code: S26381-K459-L100
Keyboard KB900		The KB900 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB900 the ideal input device for any PC or Notebook user. If you accidently spill some water or coffee onto the keyboard, this special construction helps the liquid to flow away.	S26381-K560-L4** (**: Country specific variation)

More information

Fujitsu OPTIMIZATION Services

In addition to the FUJITSU CELSIUS R940, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about the FUJITSU CELSIUS R940, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts/CELSIUS

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment

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